

TRANSMITTAL
Blackhawk Environmental Testing, Inc.

DATE: March 31, 2005

Exemption 6

TO: Mr. Ken Herstosky
EPA Region VII

FROM: Ollie R. Thurman

RE: Phase 2 Report
Wayne Mfg
EPA RCRA ID No. IAD005277256

PURPOSE: ___ As You Requested
 X For Your Information
 ___ For your Approval
 X Review and Reply
 ___ Other (See Remarks)

REMARKS:

Ken,

Please call me after you get a chance to review the subject report. Specifically, I'd like to know if the site will remain a "NFRAP" designation. If remediation will be required in the future, what site specific target level will likely be assigned? The property is up for sale and the client would like a proposal to achieve EPA closure.

Ollie

RECEIVED

APR 04 2005

ARTD.RCAR

PHASE 2 SITE INVESTIGATION

**C. W. Process Company
5051 Williams Boulevard S.W.
Cedar Rapids, Iowa
EPA RCRA ID No. IAD005277256**

Prepared for:

The [REDACTED] Estate

BET Report No. #04486
March 30, 2005

Prepared by:

Blackhawk Environmental Testing, Inc.
P.O. Box 85
Denver, Iowa

Telephone: (319) 984-6600

Telefax: (319) 984-6961

March 30, 2005

Blackhawk
Environmental
Testing

Michael W. Rickert
Attorneys at Law
P.O. Box 193
Reinbeck, IA 50669

Re: Well Survey/Phase 2 Site Investigation
C. W. Process Company
5051 Williams Boulevard S.W.
Cedar Rapids , Iowa

Dear Mr. Rickert:

Introduction

The purpose of this report is to present the field data collected by Blackhawk Environmental Testing, Inc. (BET) for the above referenced project. The work was performed in accordance with BET proposal No. 04486 and your written authorization of November 12, 2004.

Background Information

The above referenced site consists of one vacant, approximately 1,800 square foot house on partial basement with a nearby approximately 4,500 square foot metal manufacturing building with concrete floors and several small attached storage sheds. An approximate 1,000 square foot garage and several other storage buildings are also located on site situated with approximately 23 acres of crop land. Until recently, the site was occupied by the C. W. Process Company, a hammer handle manufacturing facility.

The majority of the metal building space is considered factory and machining areas. Four furnaces are located off the factory area on the northeast side of the building. A small office is located on the northwest side of the building. A hazardous waste staging area is located on the southeast side of the building. Adjacent west is an evaporator unit closure area. A fiberglass storage area is located on the southwest side of the building. A gravel driveway runs from Williams Blvd. past the house, garage and manufacturing building to a shed at the south end of the property containing a waste storage area. The balance of the outside area is covered with grass.

An EPA mandated closure plan was submitted on August 22, 1996 and approved on September 9, 1996. The closure plan and the associated closure plan development report of July 1994 identified several potential closure areas: a hazardous waste staging area, an evaporator dry down area, a hazardous waste storage area and former furnace #2. In addition, the BET phase 1 environmental assessment report of January 7, 2004 identified furnace #1, a former treatment pond, ASTs, hundreds of mostly empty drums and old cars and other scrap yard items as recognized environmental conditions. The original phase 2 report dated July 17, 2004, identified cyanide in groundwater exceeding the MCL.

Site Activity

A BET field technician and crew were mobilized to the site on December 14, 2004. A total of four hand auger soil borings were advanced, one in the suspected former treatment pond and three surrounding the cyanide source. The borings were advanced through clay and sand layers into a dense gray sandy lean clay. All four borings were converted into temporary monitoring wells. Approval was obtained from the neighboring property owner prior to locating the boring on the adjoining east cropland. The monitoring well was removed and the boring plugged with bentonite subsequent to sampling. Boring logs for the four new and three existing monitoring wells are appended.

A BET field technician was mobilized to the site on December 20, 2004. At the property owners request, a tap water sample labeled DWW #2 was collected from the kitchen of the adjoining east residential property. Several gallons of drinking water were flushed to remove stagnant water from the drinking water well and associated piping prior to sample collection. Each of the temporary monitoring wells were developed by removing a minimum of three well volumes from each well. A groundwater sample was subsequently collected from each well and retained for laboratory analysis. The five water samples were submitted for laboratory analysis of cyanide.

A single 55 gallon drum was utilized for decontamination of drill and hand auger sampling equipment. Purged groundwater was subsequently containerized in the same drum. It will remain stored on site near the former treatment pond until necessary testing and disposal activities are completed. A site plan map is appended as figure 1 and a facility drawing is appended as figure 2.

Well Survey

The Iowa Geological Survey Bureau was contacted regarding drinking water wells within 1000 feet of the contaminant source. No wells were identified in their database. The Cedar Rapids water department confirmed the houses adjoining south of the site on 33rd Avenue S.W. are not connected to city water. One residence, [REDACTED] at 4531 33rd Avenue S.W., confirmed that all the neighbors on his street were supplied by private drinking water wells. He believes his drinking water well is approximately 150 feet deep.

The county sanitarian, [REDACTED], was also contacted. He reviewed his files and reported the private drinking water well at 5001 Williams Blvd. S.W. was tested in 1994; 4471, and 4531 33rd Avenue S.W. wells were tested in 1992; and, the 4551 33rd Avenue S.W. well was tested in 1992 and again in 2001. All the testing indicated good wells and no other information or well logs were available.

Analysis

The one drinking water sample and four groundwater samples were transported to Test America, Inc. for analysis. The drinking water well sample did not report cyanide exceeding method detection limits. The four monitoring wells reported cyanide at concentrations ranging from 0.016 to 22.2 mg/l. The MCL for cyanide is 0.2 mg/l.

Chemical	Date Sampled	TMW4	TMW5	TMW6	TMW7	Standard (mg/l)
Cyanide	12/20/04	20.6	22.2	0.016	0.84	0.2

Discussion

Cyanide concentrations in groundwater exceed the MCL of 0.2 mg/l. The source continues to be located at TMW1 and the cyanide source area has been defined.

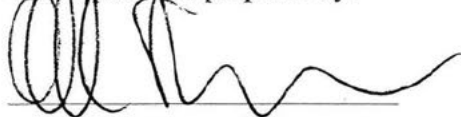
Recommendations

Per your direction, a copy of this report has been forwarded to Mr. Ken Herstosky of the EPA.

Standard of Care

The data contained in this report was collected in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by:

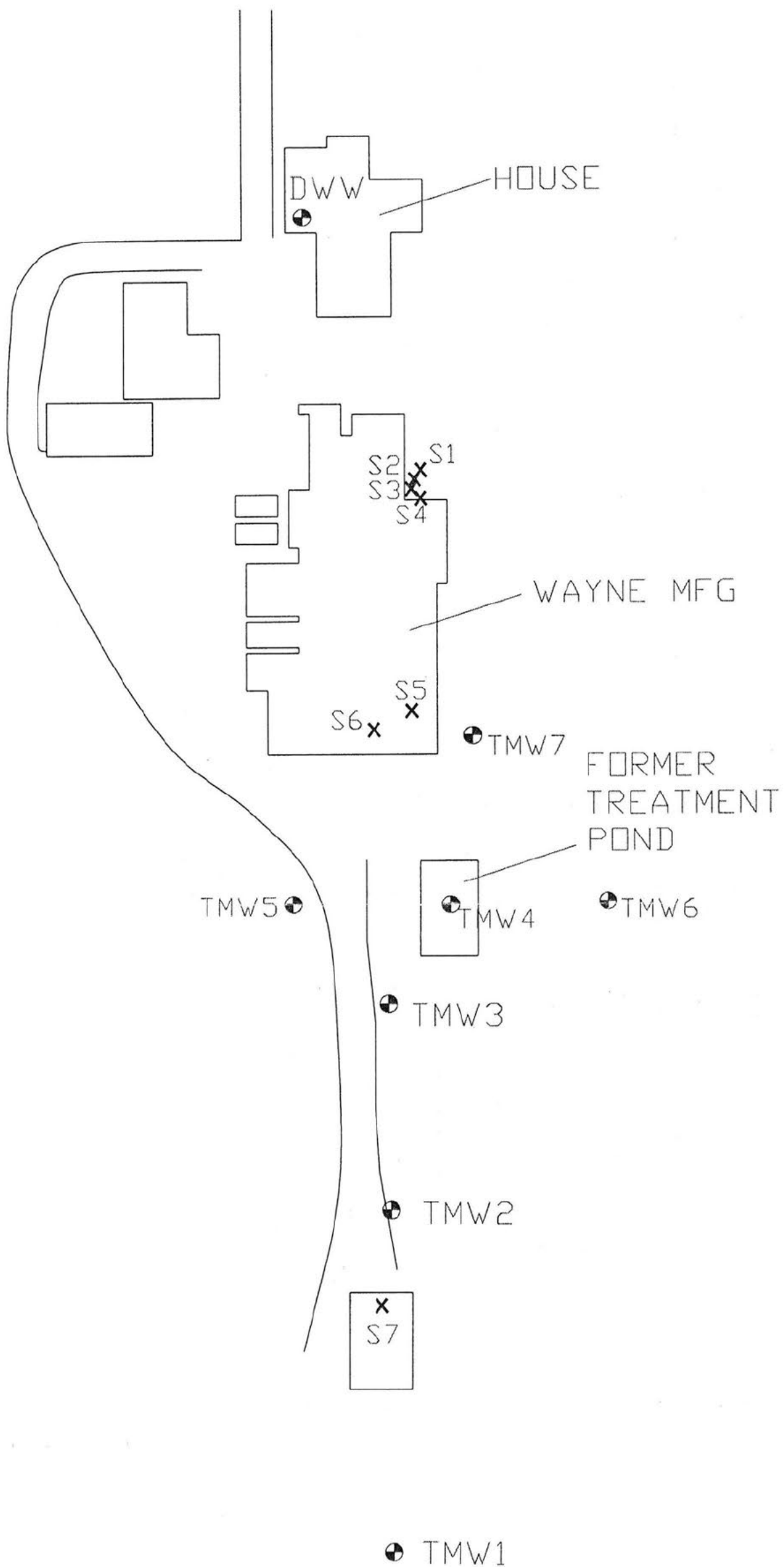


Ollie R. Thurman, P.E.
Certified Groundwater Professional

Date: March 30, 2005

pc: Ken Herstosky/EPA
File# 04486

Attachments: Site Plan Map
Facility Drawing
Site Vicinity Map
Groundwater Flow Direction Map
Cyanide Plume Map
IGS Well Search Results
Analytical Report
Boring Logs



LEGEND	
SOIL SAMPLE	X
MONITORING WELL	●


SITE PLAN MAP

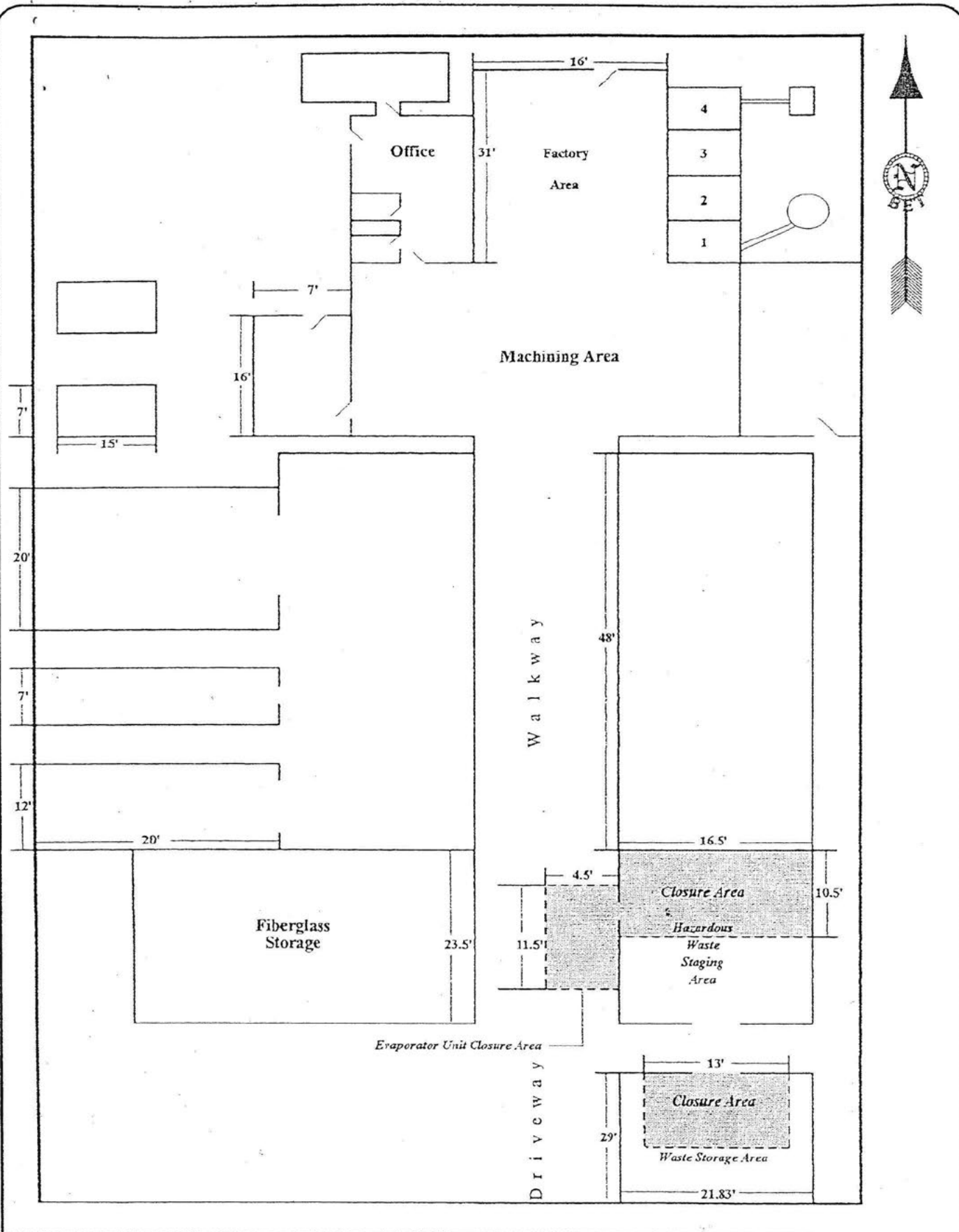
C.W. PROCESS COMPANY
5051 WILLIAMS BOULEVARD
CEDAR RAPIDS, IOWA

Blackhawk
Environmental
Testing

P.O. Box 85
Denver, IA 50622
(319) 984-6600

PROJECT #: 04432
DRAWN BY: ORT
DATE: 7/16/04

FIGURE: 1
REVIEWED BY: 
SCALE: 1"=40'



FACILITY DRAWING

C.W. PROCESS COMPANY
5051 WILLIAMS BOULEVARD
CEDAR RAPIDS, IOWA

Blackhawk
Environmental
Testing

P.O. Box 85
Denver, IA 50622
(319) 984-6600

PROJECT #: 03414

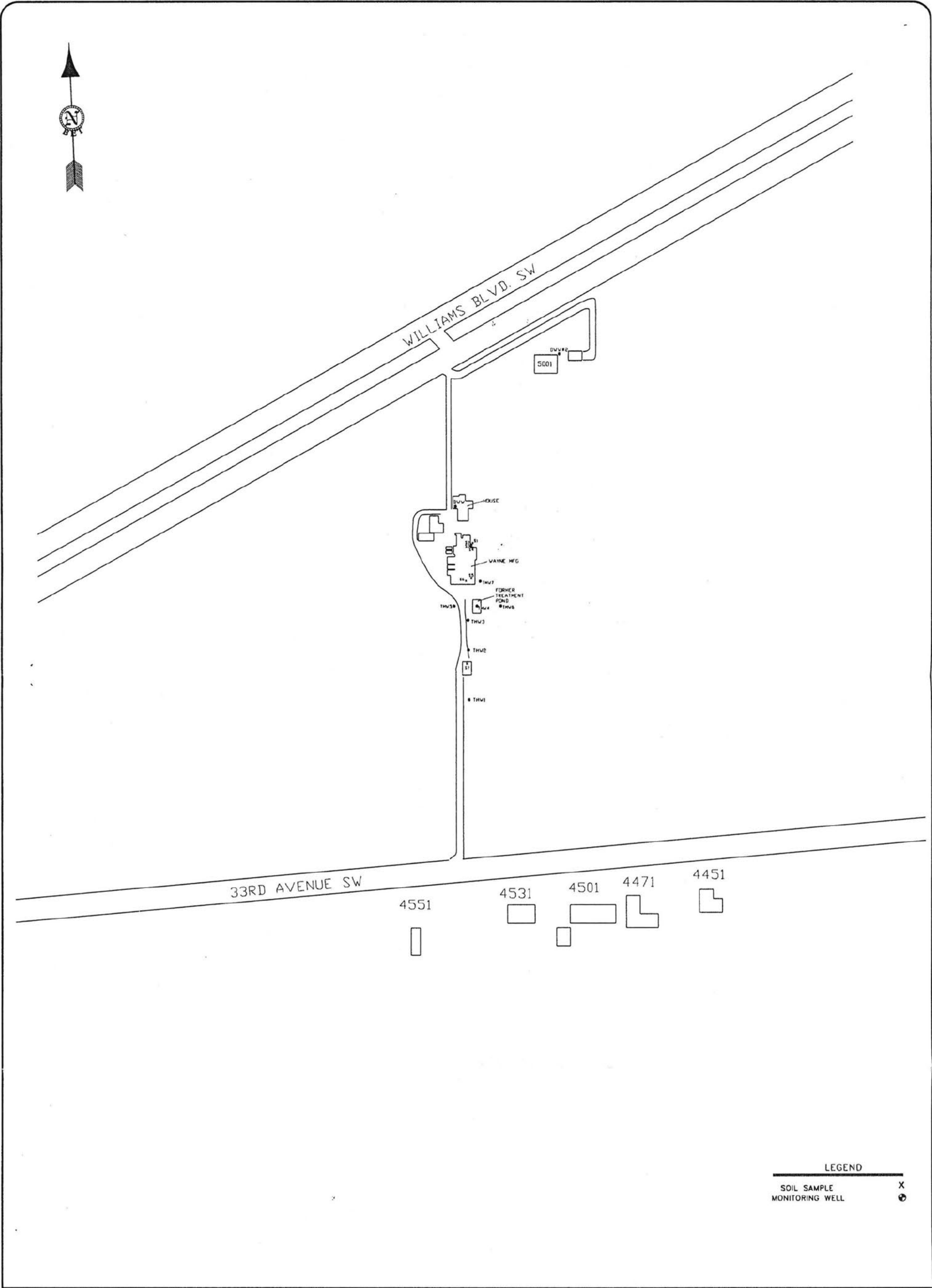
FIGURE: 2

DRAWN BY: ORT

REVIEWED BY: *Q*

DATE: 12/3/03

SCALE: NA



SITE VICINITY MAP

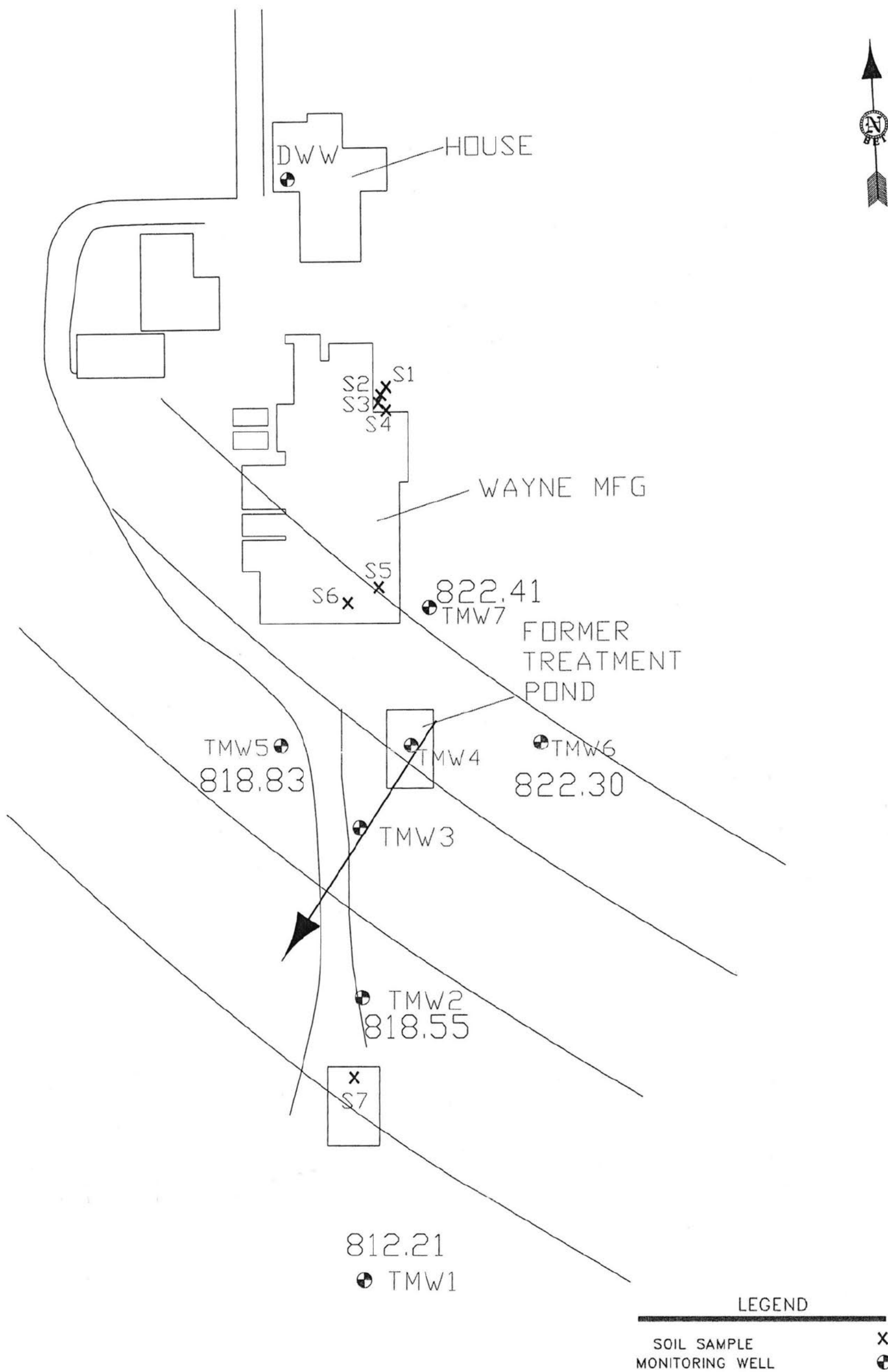
C.W. PROCESS COMPANY
5051 WILLIAMS BOULEVARD
CEDAR RAPIDS, IOWA

Blackhawk
Environmental
Testing

P.O. Box 85
Denver, IA 50622
(319) 984-6600

PROJECT #: 04432
DRAWN BY: SKT
DATE: 3/30/05

FIGURE: 3
REVIEWED BY:
SCALE: 1"=200'



GROUNDWATER FLOW DIRECTION
MAP (12/20/05 DATA)
C.W. PROCESS COMPANY
5051 WILLIAMS BOULEVARD
CEDAR RAPIDS, IOWA

Blackhawk
Environmental
Testing

P.O. Box 85
Denver, IA 50622
(319) 984-6600

PROJECT #: 04432
DRAWN BY: ORT
DATE: 7/16/04

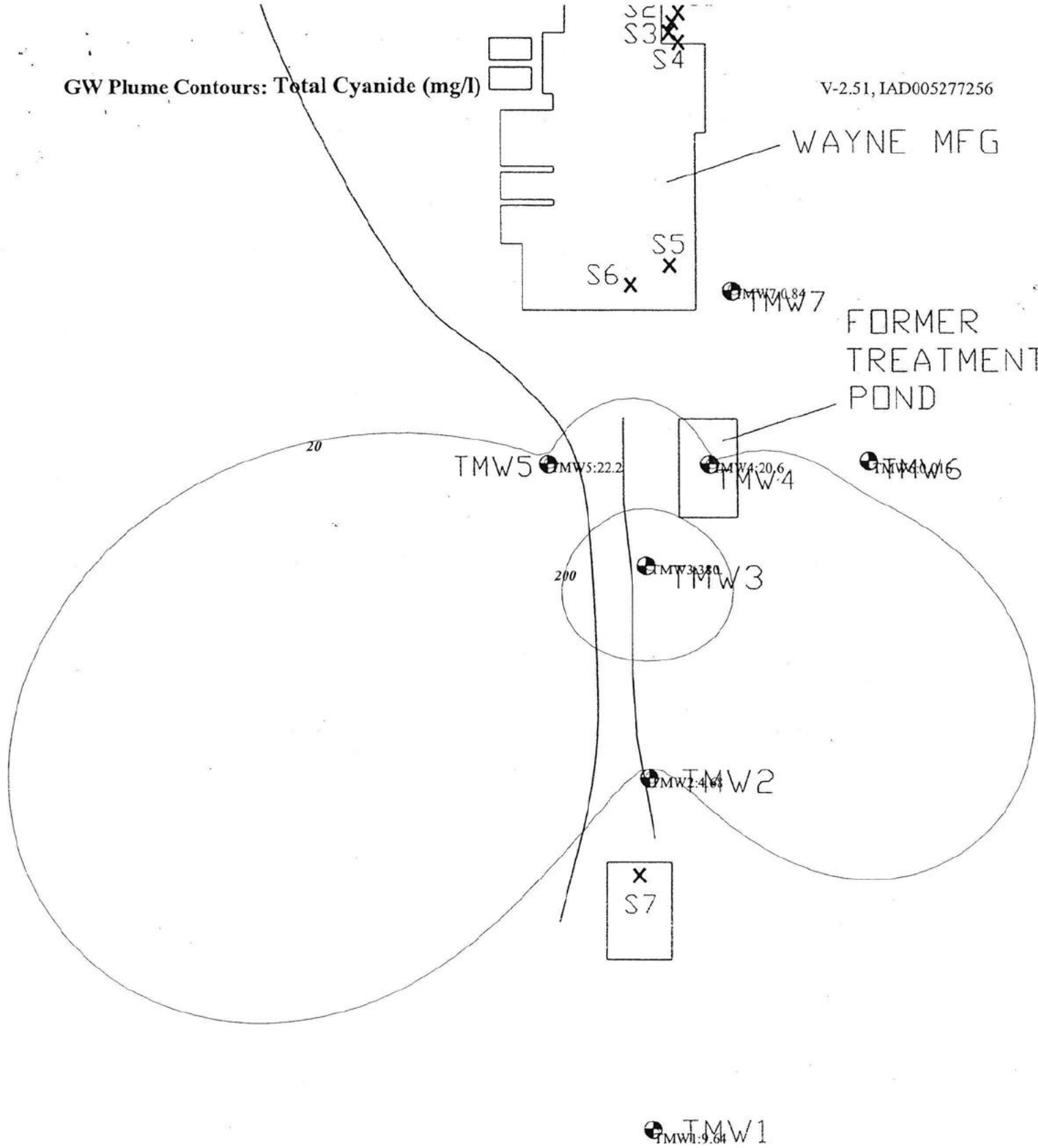
FIGURE: 4
REVIEWED BY:
SCALE: 1"=40'

GW Plume Contours: Total Cyanide (mg/l)

V-2.51, IAD005277256

WAYNE MFG

FORMER
TREATMENT
POND



1 inch = 40 feet

Iowa Department of Natural Resources
109 Trowbridge Hall
Iowa City, IA 52242-1319
319-335-1575
319-335-2754 (fax)



To: Ollie Thurman
Blackhawk Environmental Testing, Inc.
P.O. Box 85
Denver, IA 50622
319-984-6600/319-984-6961 (fax)

From: Paul VanDorpe

Date: 3/8/2005

Subject: Well search results

No wells were found that met the criteria of the requested search

Included in search	No. of wells	Database
X	0	IGS well database general well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 12/2004.
X	0	Public wells (municipal) municipal well database maintained by IGS, location accuracy varies 3,730 to 25 ft., under development
X	0	Public wells (non-municipal) municipal well database maintained by IGS, location accuracy varies 3,730 to 25 ft., under development
X	0	Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/-17m., Last update 12/2004.
X	0	Wells registered for testing wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m. Last update 9/2001, no future updates planned.
X	0	Permitted private wells wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Registered abandoned wells wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Public water supply wells and intakes locational accuracy 220 m., last updated 8/96
X	0	Water use permit facilities facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/- 3,750 ft.; last updated 10/96
X	0	Agricultural drainage wells locational accuracy 100m., last updated 4/98

NOTE: This "redo" well search would not have been necessary if the site had been adequately located in the first request submitted on 2/21/2005. Inadequate location maps for sites are not the responsibility of the DNR; therefore, this search is considered to be a new well search request.

IGS Well Search Results for client-supplied map location



0 100 200 300 400 500 Feet

No wells were located in the search area



Iowa Geological Survey
109 Trowbridge Hall
Iowa City, IA 52242-1319
319-335-1575
319-335-2754 (fax)
March 8, 2005

ANALYTICAL REPORT

Ollie Thurman
BLACKHAWK ENVIRONMENTAL
TESTING, INC.
PO Box 85
Denver, IA 50622-0085

12/30/2004

TestAmerica Job: 04.17862

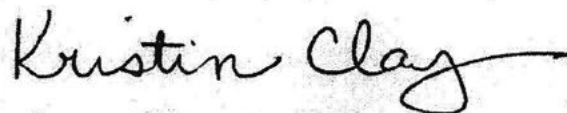
Project Number: 04486
Project: Wayne Mfg-Cedar Rapids

Enclosed is the Analytical Reports for the following samples submitted to the Cedar Falls Division of TestAmerica Analytical Testing Corporation for analysis.

Sample Number	Sample Description	Date Taken	Date Received
843244	Kitchen Tap DDW #2	12/20/2004	12/20/2004
843245	TMW #7	12/20/2004	12/20/2004
843246	TMW #6	12/20/2004	12/20/2004
843247	TMW #5	12/20/2004	12/20/2004
843248	TMW #4	12/20/2004	12/20/2004

TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.



Kristin Clay
Inorganics Operations Manager

ANALYTICAL REPORT

Ollie Thurman
BLACKHAWK ENVIRONMENTAL
TESTING, INC.
PO Box 85
Denver, IA 50622-0085

12/30/2004

WAYNE MANUFACTURING-CEDAR RAPIDS, IA
04486

Date Received: 12/20/2004
Job Number: 04.17862

	<u>Result</u>	<u>Units</u>	<u>Flags</u>	<u>Date Taken</u>	<u>Date Analyzed</u>	<u>Time Analyzed</u>	<u>Analyst</u>	<u>Analysis Method</u>
843244 Kitchen Tap DDW #2 Cyanide, Total	<0.010	mg/L		12/20/2004	12/23/2004	12:24	tlz	EPA 335.4
843245 TMW #7 Cyanide, Total	0.084	mg/L		12/20/2004	12/30/2004	14:40	tlz	EPA 335.4
843246 TMW #6 Cyanide, Total	0.016	mg/L		12/20/2004	12/30/2004	14:41	tlz	EPA 335.4
843247 TMW #5 Cyanide, Total	22.2	mg/L		12/20/2004	12/23/2004	12:26	tlz	EPA 335.4
843248 TMW #4 Cyanide, Total	20.6	mg/L		12/20/2004	12/23/2004	12:27	tlz	EPA 335.4

Key to Flags:

TestAmerica Job Number: 04.17862

ATTACHMENTS

Following are the sample receipt log and the chain of custody applicable to this analytical report.

Any abnormalities or departures from sample acceptance policy shall be documented on the "Sample Receipt and Temperature Log Form" and Sample Non-Conformance Form" (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility please visit our website at **www.TestAmericaInc.com**.

This data has been produced in compliance with 2002 NELAC Standards (July 2004), except where noted.

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) and are sampled in accordance with TA-CF SOP CF09-01.

This report shall not be reproduced, except in full, without written approval of the laboratory.

For questions regarding this report, please contact the individual who signed the analytical report.

TestAmerica

ANALYTICAL TESTING CORPORATION

704 ENTERPRISE DRIVE • CEDAR FALLS, IA 50613 • 800-750-2401 • 319-277-2425 FAX

Sample Receipt and Temperature Log Form

Client: Black Hawk Envir Project: _____

City: _____

Date: 12/2/04 Receiver's Initials CEW Time (Delivered): 4:55

Temperature Record

Cooler ID# (If Applicable)

2 °C / On Ice

☐ Temp Blank

☐ Temperature out of compliance

Custody seals present?

☐ Yes

Custody seals intact?

☐ Yes ☐ No

☐ Non-Conformance report started

Thermometer:

☐ IR - 905085 "A"

☐ IR - 809065 "B"

☐ CF07-03-T2

☐ 22126775

Courier:

☐ Airborne

☐ Speedy

☐ UPS

☐ TA Courier

☐ Velocity

☐ TA Field Svs

☐ FedEx

☒ Client

☐ DHL

☐ US Postal

☐ Other

Exceptions Noted

☐ Sample(s) not received in a cooler.

☐ Samples(s) received same day of sampling.

☒ Evidence of a chilling process

☐ Temperature not taken:

Log-In by:

LS MF EM

OT _____

*Refer to SOP CF01-01 for Temperature Criteria

C:\QA Folder\QA Forms & Log Book pgs\Cooler Receipt rev7.doc

Company: Blackhawk Environmental Testing, Inc.

Your PO #: _____

Send Report To: Ollie Thurman

Invoice To: BET

Address: P.O. Box 85

Test America Quote #:

City/State/Zip Code: Denver, IA 50622-0085

Project Name: Wynn Manufacturing

Telephone Number: 319-984-6600

Fax: _____

Cedar Rapids, IA -

Sampled By: (Print Name) David Thurman

Project Number: 04486

(Signature)

Project Manager: oet

[illegible]



NOTE: All turn around times are calculated from the time of receipt at Test America.

NOTICE: Pre-Arrangements must be made **AT LEAST 48 Hours in ADVANCE** to receive results with these turn around time commitments; Additional Charges may be assessed.

Note: ~~There~~ There may be a charge assessed for Test America disposing sample remainders.

NOTES:

**THERE IS A \$4.00 CHARGE FOR EACH CHROMATOGRAM

Relinquished by:	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	12/20/04	17:00						
Received for Test America by:	Date	Time	COC Seals Present and Intact? Yes No	Shipped Via:				
	12/20/04	17:00	Temperature Upon Receipt					

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW1		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA			
Boring Depth (ft) X Diameter (in): 18' x 7"				Drilling Method: 3 1/4" HSA			
Well Contractor Name: Ollie Thurman Registration Number: 40746				Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 821.50			Top of Casing Elevation (ASL): 823.12				
Date: 5/19/04 Start Time: 9:20		Date: 5/19/04 End Time: 10:30		UST Number			
				EPA RCRA ID Number : IAD005277256			
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-			1.5	SS	0.0	Topsoil, ORGANIC CLAY, dark brown (CL)	
-2			3	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray (CL)	
-4			5	SS	0.0		
-6			7	SS	0.0	SILTY SAND, brown, moist (SM)	
-8			9	SS	0.0	SANDY LEAN CLAY with a little gravel, dense, brown with reddish brown (CL)	
-10			11	SS	0.0		
-12			13	SS	0.0	SILTY SAND, brown, wet (SM)	
-14			15	SS	0.0	SANDY LEAN CLAY, with a little gravel, gray, dense (CL)	
-16			16.5	SS	0.0		
-18			18	SS	0.0		
-20							End of boring @ 18'

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04	12/20/04		
Water Levels (ASL)	Level:	808.64	818.60	812.21		
Static Water Level Symbol	Time:	11:00	14:26	12:30		

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW2		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA			
Boring Depth (ft) X Diameter (in): 18' x 7"				Drilling Method: 3 1/4" HSA			
Well Contractor Name: Ollie Thurman Registration Number: 40746				Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 823.07			Top of Casing Elevation (ASL): 822.65				
Date: 5/19/04 Start Time: 10:55		Date: 5/19/04 End Time: 12:00		UST Number			
				EPA RCRA ID Number : IAD005277256			
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-			1.5	SS	0.0	FILL, 6" of gravel over clay, brown	
-2			3	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray (CL)	
-4			5	SS	0.0		
-6			7	SS	0.0	SILTY SAND, brown, wet (SM)	
-8			9	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled gray, to gray, dense (CL)	
-10			11	SS	0.0		
-12			13	SS	0.0		
-14			15	SS	0.0		
-16			16.5	SS	0.0		
-18			18	SS	0.0	End of boring @ 18'	
-20							

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04	12/20/04		
Water Levels (ASL)	Level:	818.89	821.70	818.55		
Static Water Level Symbol	Time:	14:25	15:00	12:15		

DNR FORM 542-1392

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW3		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA		
Boring Depth (ft) X Diameter (in): 20' x 7"				Drilling Method: 3 1/4" HSA		
Well Contractor Name: Ollie Thurman Registration Number: 40746				Logged by: Ollie Thurman		
Ground Surface Elevation (ASL): 823.98			Top of Casing Elevation (ASL): 823.59			
Date: 5/19/04 Start Time: 12:45		Date: 5/19/04 End Time: 13:50		UST Number		
				EPA RCRA ID Number : IAD005277256		
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
-			1.5	SS	1.4	FILL, 6" of gravel over clay, dark brown
-2			3	SS	1.7	SANDY LEAN CLAY, discolored green (CL)
-4			5	SS	0.8	
-6			7	SS	1.1	SANDY LEAN CLAY, brown, discolored gray and reddish brown (CL)
-8			9	SS	2.3	SAND light brown, medium grained (SP)
-10			11	SS	1.0	
-12			13	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray to gray, dense (CL)
-14			15	SS	0.0	
-16			17	SS	0.0	
-18			18.5	SS	0.0	
-20			20	SS	0.0	
						End of boring @ 20'

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04			
Water Levels (ASL)	Level:	dry	822.58			
Static Water Level Symbol <input checked="" type="checkbox"/>	Time:	14:30	15:30			

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW4		Facility Wayne's Mfg. Co. Name: #04432	Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA				
Boring Depth (ft) X Diameter (in): 5.5' x 3"				Drilling Method: 3" HA			
Well Contractor Name: Ollie Thurman Registration Number: 5475				Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 824.95			Top of Casing Elevation (ASL): 826.81				
Date: 12/14/04 Start Time: 13:30		Date: 12/14/04 End Time: 14:30		UST Number	EPA RCRA ID Number : IAD005277256		
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-						Fill, 8" gravel over clay, dark brown.	
-1							
-2							wet at 2.5'
-3							
-4							
-5							SANDY LEAN CLAY, brown (CL)
-6							End of boring at 5.5'
-7							
-8							
-9							
-10							

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	12/15/04	12/20/05			
Water Levels (ASL)	Level:	823.25	823.48			
Static Water Level Symbol	Time:	11:24	11:05			

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW5		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA		
Boring Depth (ft) X Diameter (in): 7' x 3"				Drilling Method: 3" HA		
Well Contractor Name: Ollie Thurman Registration Number: 5475				Logged by: Ollie Thurman		
Ground Surface Elevation (ASL): 822.56			Top of Casing Elevation (ASL): 824.61			
Date: 12/14/04 Start Time: 14:30		Date: 12/14/04 End Time: 15:20		UST Number		
				EPA RCRA ID Number : IAD005277256		
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
-						TOPSOIL, organic clay, dark brown (OL)
-1						
-2						SANDY LEAN CLAY with a little gravel, brown to dark brown (CL)
-3						
-4						SANDY LEAN CLAY, light brown (CL)
-5						wet at 5'
-6						LEAN CLAY, brown mottled with gray. (CL)
-7						End of boring at 7'
-8						
-9						
-10						

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	12/15/04	12/20/04			
Water Levels (ASL)	Level:	818.67	818.83			
Static Water Level Symbol	Time:	11:26	11:00			

DNR FORM 542-1392

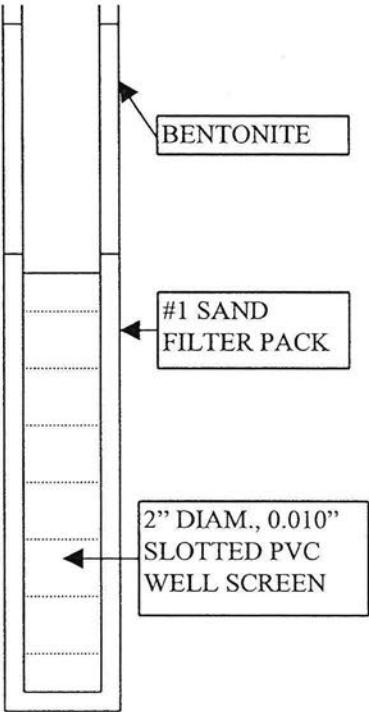
SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW6		Facility Wayne's Mfg. Co. Name: #04432	Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA				
Boring Depth (ft) X Diameter (in): 8' x 3"			Drilling Method: 3" HA				
Well Contractor Name: Ollie Thurman Registration Number: 5475			Logged by: Ollie Thurman				
Ground Surface Elevation (ASL): 826.54			Top of Casing Elevation (ASL): 829.34				
Date: 12/15/04 Start Time: 11:10		Date: 12/15/04 End Time: 12:05		UST Number	EPA RCRA ID Number : IAD005277256		
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-						TOPSOIL, organic clay, dark brown (OL)	
-1							
-2							SANDY LEAN CLAY with a little gravel, brown. (CL)
-3							
-4							LEAN CLAY medium dense to dense, reddish brown mottled with gray. (CL)
-5							
-6							SANDY SILT brown, wet at 6' (SM)
-7							
-8							End of boring at 8'
-9							
-10							


* SS (split spoon) HS (hollow stem auger)

Observations	Date:	12/15/04	12/20/04			
Water Levels (ASL)	Level:	821.90	822.30			
Static Water Level Symbol	Time:	12:55	11:10			

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW7		Facility Wayne's Mfg. Co. Name: #04432	Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA		
Boring Depth (ft) X Diameter (in): 8.5' x 3"			Drilling Method: 3" HA		
Well Contractor Name: Ollie Thurman Registration Number: 5475			Logged by: Ollie Thurman		
Ground Surface Elevation (ASL): 826.07		Top of Casing Elevation (ASL): 828.36			
Date: 12/15/04 Start Time: 12:10	Date: 12/15/04 End Time: 13:10	UST Number	EPA RCRA ID Number : IAD005277256		
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No. Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
-					TOPSOIL, organic clay, dark brown (OL)
-1					
-2					SANDY LEAN CLAY, brown. (CL)
-3					
-4					
-5					LEAN CLAY, reddish brown mottled with gray, wet at 5.5' (CL)
-6					SANDY LEAN CLAY with a little gravel, brown, wet (CL)
-7					SAND coarse grained, brown (SP)
-8					SANDY LEAN CLAY dense, gray (CL)
-9					End of boring at 8.5'
-10					

* SS (split spoon) HS (hollow stem auger)

Observations	Date:	12/15/05	12/20/05			
Water Levels (ASL)	Level:	dry	822.41			
Static Water Level Symbol 	Time:	13:20	10:55			